Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	DOCKET FILE COPY ORIGINAL
Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5 - 29.5 GHz Frequency Band, to Reallocate the 29.5 - 30.0 GHz Frequency Band, to establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services	CC Docket No. 92-297

REPLY COMMENTS OF NETSAT 28 COMPANY, L.L.C.

NetSat 28 Company, L.L.C. ("NetSat 28"), by its attorneys, hereby files these reply comments in response to the Commission's Third Notice of Proposed Rulemaking and Supplemental Tentative Decision in the above proceeding.[1] Initial comments in this proceeding were filed on September 7, 1995. Based on the application of some of the initial commenters, the original date of September 28, 1995 for filing of reply comments was extended until October 10, 1995.[2] Although the Third Notice and the initial comments address a broad range of issues concerning the appropriate rules for the 28 GHz band, NetSat 28 limits these comments to the issue of orbital spacing for satellites using this frequency.

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[1] Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, CC Docket No. 92-297, Third Notice of Proposed Rulemaking and Supplemental Tentative Decision (July 28, 1995)(hereinafter "Third Notice").

[2] Order, DA 95-2033, CC Docket No. 92-297 (Sept. 25, 1995).

I. BACKGROUND

NetSat 28 recently filed an application with the Commission for authorization to construct, launch and operate a 28 GHz geostationary satellite in the fixed satellite service. In that application, NetSat 28 proposes to construct and operate a single satellite which will have the capacity to provide up to 500,000 simultaneous users with fully interactive 1.544 MHz service (T1 rate). The NetSat 28 design permits 1000 antenna beams to each support up to 500 communications channels at a T1 rate. An innovative optical switching technique will permit NetSat 28 to offer fully switched service to all 500,000 simultaneous users.

In its application, NetSat 28 requested authorization to operate this satellite at 103° W.L. As is explained in greater detail in the application, the NetSat 28 satellite can operate in a 2° orbital spacing environment, however, this would require significant system adjustments. In particular, NetSat 28 would need to modify its operating parameters, lower its data rates or system capacity or use larger aperture earth stations. As NetSat 28 stated in its application, it requested 8° orbital spacing to allow NetSat 28 to fulfill the promise of its proposed system.

Both the Third Notice and comments submitted in this proceeding presume that the public interest is advanced by applying the Commission's existing 2° orbital spacing policy for the C- and Ku-bands to the Ka band. NetSat 28 submits that the characteristics of this higher frequency and the innovative technology proposed for this band support a different approach to orbital spacing in this proceeding.

II. THE THIRD NOTICE

The Third Notice did not contain a detailed discussion of orbital spacing issues. Instead, the Commission referenced its existing Part 25 rules for the geostationary fixed

satellite service[3] and preliminarily proposed to apply those rules to the Ka band.[4] The Commission has solicited comments on this proposal.

The initial commenters who addressed this issue assumed the continued need for 2° orbital spacing. For example, Hughes Communications explicitly requested that the Commission reject any applications for satellite systems which are incompatible with 2° spacing.[5] GE Americom also has supported the Commission's proposal to impose 2° spacing in the Ka band.[6] NetSat 28 disagrees with those comments which rely on 2° orbital spacing as the only means of achieving efficient use of the Ka band. NetSat 28 suggests that the Commission analyze the proposed uses of the spectrum, paying specific attention to the impact on users as well as service providers, before reaching any determination that wider orbital spacing will be inherently inefficient.

III. 2° ORBITAL SPACING MAY NOT BE REQUIRED IN THE Ka BAND

As an initial matter, the Commission should not address a 2° orbital spacing requirement in the Ka band unless the Commission makes a determination that all potential service providers in this band cannot be accommodate with greater orbital spacing. The Commission's decision to reduce orbital spacing in the C- and Ku-bands was based on a need to accommodate more service providers than would be possible with greater orbital

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[3] The Commission's rules currently require that an applicant for a space station authorization demonstrate how the proposed space station complies with 2° orbital spacing requirements. 47 C.F.R. § 25.140.

[4] Third Notice at ¶ 126.

[5] Comments of Hughes Communications Galaxy, Inc. dated Sept. 7, 1995 at 35-36. Hughes states that 2° orbital spacing is the key to "maximizing the amount of spectrum resources available . . . ."

[6] Comments of GE American Communications, Inc. dated Sept. 7, 1995 at 20.

spacing. No such showing has been made in the Ka band. In fact, the Commission has not yet had an opportunity to examine the recently submitted applications for satellite authorizations. In is possible that the Commission will be able to accommodate the full range of applicants without requiring that all service providers comply with 2° orbital spacing.

In 1983, when the Commission reduced orbital spacing for the C- and Ku-bands, it confronted growing demand for satellite services without the ability to authorize service providers to meet that demand within the then existing regulatory framework.[7] It was only through the authorization for construction and launch of additional satellites that the Commission was able to satisfy a growing demand for satellite services. The decision to impose a 2° orbital spacing requirement was identified as the only means of satisfying demand, particularly among new users.

This situation does not yet exist in the Ka band, and the Commission has not yet made a similar determination for this frequency band. If the Commission is able to accommodate all applicants without 2° orbital spacing, there will not be a need to address the issue. The Commission itself has acknowledged that 2° orbital spacing may not be required for the Ka band if the orbital arc can accommodate all competing applications.[8] NetSat 28 encourages the Commission to examine the proposed uses of this band before making any determination concerning orbital spacing. NetSat 28 believes that the demands

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[7] See Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Revisions, CC Docket No. 81-704, 48 FR 40233 (1983).

[8] See Norris Satellite Communications, Inc. at n.17 which acknowledges that additional authorizations could be accommodated in the Ka band even if NorSat's system ultimately requires greater than 2° orbital spacing.

of the satellite operator are not the only measure to consider but that the impact on users and user equipment should be given equal weight by the Commission.

IV. Allowing Greater Orbital Spacing in the Ka Band will Serve the Public Interest

The Commission's reduced orbital spacing policy is based on the assumption that increasing the number of satellites in the orbital arc will increase the number of available circuits and the capacity available to the public. Thus, the public interest in affordable and available satellite services will be advanced by a greater number of available circuits.

NetSat 28 submits that this logic may not apply in the Ka band. NetSat 28 has proposed a new satellite system design which will provide far greater capacity than is currently proposed by other applicants or service providers occupying multiple orbital locations. The NetSat 28 satellite offers the public levels of efficiency that have not previously existed in the satellite industry. Although NetSat 28's request for 8° spacing would preclude numerous other satellites, the capacity provided by NetSat would make this satellite more efficient than those of many other applicants combined and provide the public with the added benefit of small diameter antennas and subscriber equipment which does not require professional installation.

For example, the Lockheed Martin Corporation has proposed to operate 9 satellites in the Ka band. Each satellite would provide 10,000 simultaneous 384 kbps circuits. Even if Lockheed Martin filled the 6 orbital positions required for 8° spacing, it would only provide 60,000 circuits, far less capacity than that offered by NetSat 28.

NetSat 28's proposal, however, will meet the public interest in the most efficient manner if the public can use smaller, low cost earth stations. A requirement that NetSat 28 comply with 2° spacing will deny the public this benefit.

CONCLUSION

For the foregoing reasons, NetSat 28 Company, L.L.C. respectfully requests that the Commission reconsider its proposal to require 2° orbital spacing in the Ka band.

Respectfully submitted,

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Dated: October 10, 1995

CERTIFICATE OF SERVICE

I, Albert Shuldiner, hereby certify that a copy of the foregoing Reply Comments of NetSat 28 Company, L.L.C. were served on all parties of record in this proceeding by first class mail, postage prepaid, this 10th day of October, 1995.

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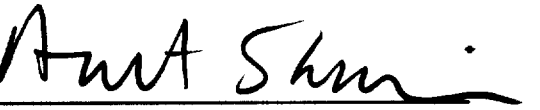
By 
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